



BOROUGH OF GLOSSOP.

EDUCATION COMMITTEE.

ANNUAL REPORT

OF THE

School Medical Officer

(E. H. Marcus Milligan, M.D., D.P.H.),

FOR THE YEAR 1926.



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GLOSSOP & HADFIELD.



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Glossop Education Authority.

ANNUAL REPORT

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School Medical Officer

FOR THE YEAR 1926.

(1) STAFF:

E. H. Marcus Milligan, M.D., D.P.H., School Medical Officer.

Peter Malloch, L.R.C.P. & S., School Oculist.

Mary Gallagher, M.B., Surgeon for Nose and Throat Diseases.

Harold Firth, L.D.S., School Dentist.

Miss B. Coventry, C.M.B., R. San. Inst. Cert., School Nurse.

Miss C. Moore, C.M.B., School Nurse.

(2) CO-ORDINATION.

(a) Co-ordination with Infant Welfare and Child Welfare Work:

The School Medical Officer is also Medical Officer of Health and Medical Officer of the Infant Clinic; the School Nurses are also Health Visitors for Maternity and Child Welfare work.

Child Welfare Record Cards are passed on to the School Medical Department.

The School Medical Department, Maternity and Child Welfare Department and the Public Health Department occupy one suite of rooms.

(b) Nursery Schools :—

There are no Nursery Schools in Glossop.

Owing to the large number of mothers working in factories a Nursery School for All Saints' and St. James' Wards and one for Hadfield Ward would be of great value.

(c) The care of Debilitated Children under School Age :—

Debilitated children are seen at the Welfare Centres and advice is given to mothers regarding their general care; in certain instances mothers are advised to obtain treatment by their own Doctor for their children or to bring them to the Tuberculosis Dispensary.

The Tuberculosis Officer can now send suitable cases to Bretby Hall, an institution belonging to the Derbyshire C.C., conducted on Sanatorium lines.

Sir George Newman in his report on the Health of the School Child has drawn attention to the large number of children entering the school each year who are already damaged by diseases that in many cases are preventable, and he emphasised the need for greater care and more treatment prior to entry to school.

In our Borough our Health Visitors visit children under school age in their homes, and we have also two Welfare Centres which are well attended. There is, however, on the whole not enough time at the disposal of our Nurses to pay the attention that is required to children over one year and under school age.

In addition there are no Clinics available for the treatment of minor ailments, teeth or nose and throat conditions, and we have no Nursery Schools where mothers who work in the factory could send their children.

Owing to the cotton trade being the staple industry of our Borough the number of women (many of whom are mothers) who work in factories is large, the figures at the 1921 Census being

3,398 out of 9,314 females over 12 years of age in the Borough (of whom 4,908 were engaged in some occupation other than domestic housework). The direction, then, in which more care could be given to debilitated children under school age would be :—

(1) The establishment of two Nursery Schools on Open Air lines, one for All Saints' and St. James' Wards and one for Hadfield Ward.

(2) The extension of our School Clinic facilities to children under school age, inclusive of Dental treatment and treatment for Enlarged Tonsils and Adenoids.

(3) An additional nurse to visit children over one year and under school age and give assistance at the Clinics.

I make a strong appeal to the Trustees of the Isaac and Harriet Jackson Trust Fund to help in establishing such facilities for promoting the health of the children of our Borough ; by doing so they would help to build up securely the health of the coming generation and promote greatly the well-being of all.

I feel sure that the Board of Education and the Ministry of Health would give every assistance in the drawing up of some such scheme and in advising the best models to follow in carrying it out.

(3) SCHOOL HYGIENE :

The details given in my reports of 1925 and 1924 still generally apply. There is one point that I would like in particular to refer to :—

The making of Hygiene a part of the child's life and habits. This I know is extremely difficult ; for instance, instead of the usual roller towel and usual school drinking cup each child ought to be taught the proper communal means of washing and drinking.

The value of fresh air and sunlight could also be taught by making fresh air and sunlight available to the children by good ventilation and open air classes.

Dental drill each day and inspections for personal cleanliness could also be means of promoting habits of cleanliness.

The value of different types of clothing and the necessity for protection against rain and keeping one's clothes dry in a climate like ours could also be made part of the daily routine. It is a common occurrence to see children going to and from school without coats while it is raining, and many are seen in which the clothing they have is insufficient to prevent the children getting well soaked.

* In another section of the report special reference will be made to the incidence of Rheumatism among school children ; I feel sure that by preventing children sitting in damp clothes this incidence could be reduced.

LECTURES ON MOTHERCRAFT.

The School Medical Officer has arranged to give four lectures yearly on the above subject to all elementary school girls over 13 years of age.

This will be put in operation almost immediately.

(4) MEDICAL INSPECTION :

The age groups inspected are Entrants, Intermediates, and children of 12 years and over ; children are occasionally examined at other ages (for instance, children may miss an examination at the usual time owing to illness).

Special examinations and Re-examinations are also carried out. In 1926 the numbers of such examinations were :

Specials, 1290 ; Re-examinations, 4471.

* See pages 8 and 26.

(5) THE FINDINGS OF MEDICAL INSPECTION.

I give herewith a table which shews the percentage of various defects found at routine examinations.

PERCENTAGE DEFECTS FOUND AT MEDICAL
INSPECTION.

No. of Children examined, 919.

Malnutrition—Bad (Requiring treatment)	1.5	Observation	2.2
Uncleanness (per Nurses' Inspections) ...	8.1		
Skin—Ringworm—Scalp	0		
Body	0		
Scabies	0		
Impetigo	0		
Other Skin Diseases	0.1		
Eyes—Blepharitis	0.2		
Conjunctivitis	0		
Keratitis	0		
Corneal Opacities	0.3		
Defective Vision (excluding Squint)			
(Requiring Treatment)...	5.7		
Squint ... ..	.8		
Other conditions ... ..	.1		
Ears—Defective Hearing ... ..	.43		
Otitis Media ... ..	.43		
Other Ear Disease	0		
Nose and Throat—Enlarged Tonsils only			
(Requiring Treatment)...	3.1		
(,, Observation) ...	2.8		
—Adenoids only			
(Requiring Treatment)...	1.7		
(,, Observation) ...	1.6		
—Enlarged Tonsils and			
Adenoids.			
(Requiring Treatment)...	1.4		
(,, Observation) ...	1.0		

Enlarged Glands (Non-Tubercular)	...	
(Requiring Treatment)...	...	4.2
(,, Observation)	...	17.9
Defective speech.		
(Requiring Treatment)...	...	0.3
Organic Heart Disease.		
(Requiring Treatment)...	...	.43
(,, Observation)	...	0.8
Functional Heart Disease	... ..	9.7
Anæmia—(Requiring Treatment)	...	1.5
(,, Observation)	...	1.9
Bronchitis—(Requiring Treatment)	...	0.8
(,, Observation)	...	0.43
Other Non-Tubercular Disease of Lung	...	0
Tuberculosis—Lungs (Definite)	... ..	0.3
,, (Suspected)	... ..	0.43
Glands (Req. Treatment)...		0.3
(,, Observation)...		0.3
All other forms	... ..	0
Nervous Conditions—Epilepsy	... ..	0
Chorea. (Req. Treatment)...		0
(,, Observation)...		0
Other. (,, do.)...		0.1
Mental Defects.	(,, do.)...	0.1
Deformities—Spine	(,, ,,)...	0.1
Rickets. (Req. Treatment)...		0.3
(,, Observation)...		0.8
Other forms. (Req. Treatment)...		0.8
Other Defects and Diseases.		
(Req. Treatment)...		2.7
(,, Observation)...		15.7
Of which Goitre.	(Req. Treatment)...	1.19
,, (,, Observation)...		2.8
Rheumatism. (,, Treatment)...		0.9
(,, Observation)...		12.9

Taking the code group children it was found 30.1 per cent. of them required treatment for one or more defects, the percentage for each group being Entrants 26.7 per cent., 8-9 group 29.3 per

cent. and leavers 33.9 per cent; it must be remembered that visual defects are not included in the Entrant group, which no doubt accounts for the percentage of this group being lower, while Goitre also swells the percentage of leavers requiring treatment.

Visual defects were 5.7 per cent. where examined for, and Goitre 1.19 (requiring treatment). The large number of children having heart defects and Rheumatism is noteworthy, but I shall consider (*) this question separately.

To compare the findings of Medical Inspection in Glossop with that of other areas I give the table of defects per thousand found in the schools of England and Wales 1925 (taken from Sir George Newman's report for 1925) and put the Glossop figures alongside them.

			Incidence of defect per 1000 children (Routine) inspected	
			England and Wales, 1925.	Glossop. 1926.
Malnutrition	...	...	9.5	15
Defective Vision	...	...	54.7	57
Squint	...	...	9.1	8
Other Eye Disease	...	...	9.5	1
Defective Hearing	...	...	5.4	4.3
Otitis Media	...	...	6.3	4.3
Enlarged Tonsils and Adenoids			53.3	6.2 62
<i>Other</i> Ear, Nose & Throat Defects			6.2	4.3
Heart Disease—Organic			2.2	4.3
Functional	...	...	0 —	97
Lung Disease—				
Tuberculosis : definite	...	...	0.5	3
Pulmonary : suspected		...	1.6	4.3
Non-Pulmonary	...	...	1.1	3
Disease of the Nervous system		...	1.8	1
Deformities	...	...	7.1	12

* See pages 8 and 26.

Regarding heart conditions it is very difficult to draw the line between Organic and Functional disease, and there are also instances in which it is difficult to say whether the defect should be put down in the observation column. If Organic cases put under the observation column were added it would make the observation column 12·3 instead of 4·3 ; among the functional group (97 per thousand) it is possible some of these were organic.

I should certainly say that about 100 per thousand, *i.e.*, 10 per cent. of all routine children, had more or less impairment of the Heart. Organic Cardiac defects as compared with other districts (4·3 Glossop, 2·2 E. & W.) appear more prevalent in Glossop. The amount of Rheumatism requiring treatment was 9 per 1,000, and in addition 129 per 1,000 were put under observation for Rheumatism ; this may have a bearing on Cardiac defects. Of other defects, Malnutrition (Glossop 15, England & Wales 9·5), Definite Pulmonary Tuberculosis (Glossop 3, England & Wales 0·5), suspect Pulmonary Tuberculosis (Glossop 4·3, England & Wales 1·6), Non-Pulmonary Tuberculosis (Glossop 3, England & Wales 1·1), are more prevalent in Glossop than in England & Wales as a whole. These are the chief differences in figures between Glossop and England & Wales.

Milk is now available in school for these delicate and pre-Tubercular and Tubercular children, and I have no doubt it will be of considerable benefit to them ; milk can also be given to such children before entering into school, by the Tuberculosis Care Committee.

(6) INFECTIOUS DISEASES.

ON THE CONTROL OF INFECTIOUS DISEASES IN SCHOOL.

The general method of dealing with infectious diseases is as follows :—

EXCLUSION.—Children are excluded from school by the M.O.H., who is also S.M.O., on the lines of the joint memorandum issued by the Ministry of Health and Board of Education.

A certificate of re-admission is sent when the child is to be re-admitted. This certificate is given after examination by the S.M.O. in every case when the child has had Diphtheria or has been a contact of a case of Diphtheria. In the case of Scarlet Fever a certificate signed by a registered Medical Practitioner stating that the child is free from infection is accepted by the S.M.O., who signs and sends a re-admission certificate to the Head Teacher. In most cases of Scarlet Fever, however, parents bring their children to the S.M.O. before returning to school.

ACTION RE CONTACTS.

Examination of contacts of children in the home is carried out as above before re-admission to school, but where an outbreak looks like extending or in case of an epidemic, examination of contacts is carried out in schools and homes, Diphtheria Contacts being swabbed. By this means, missed cases and carriers are looked for and excluded.

In the case of Diphtheria, after a thorough search for carriers (who are isolated at home or who, if Diphtheritic symptoms develop, are removed to hospital), parents are advised to have their children immunised.

METHOD ADOPTED TO DEAL WITH A SERIOUS DIPHTHERIA OUTBREAK.

During the Summer and Autumn a serious outbreak of Diphtheria occurred. This will be dealt with also in my report as M.O.H., but certain points are of interest regarding the control of the outbreak in the schools. Out of 65 cases 45 were school children. Of these school children those attending 3 schools were mainly affected and the outbreak was practically confined to one side of the Borough, St. James' and All Saint's Wards. There is no doubt in my mind that the outbreak originated in the missing of several cases of Diphtheria and this resulted in the disease getting a good start.

Three schools which we will call X, Y and Z became chiefly affected and attention was chiefly directed to them. In X there were 15 cases, Y 14 cases and Z 7 cases. All class contacts in the three schools were examined and some carriers were found, in this way 2 children of one of the Caretakers were found to have a mild form of Diphtheria and 2 children on a farm which supplied milk to the affected area were found to be affected. One child, a close contact of the 2 children on the farm was afterwards found to be a chronic virulent carrier.*

The schools therefore were combed out by frequent swabbing of contacts and prompt examination was made of the swabs; for the successful doing of this we are very much indebted to Dr. Ash, the County M.O.H. and his staff who dealt with a very large number of swabs and also to the Public Health Laboratories, Manchester.

After the contacts had been swabbed an effort was made to get them immunised and an appeal was made to parents; as a result 142 children were given 3 doses of 1 c.c. Diphtheria Prophylactic by me and a number of others were immunised by private doctors.

A few weeks after this had been done the outbreak ceased. Whether the doing of this and the isolation of carriers was the cause or whether the outbreak died out by itself remains open to question. It is exceedingly interesting, however, to see in Surgeon Commander F. Dudley's Report on "The Spread of Droplet Infection in Semi-Isolated Communities" the following remarks:—

"The fact, however, remains that, when the ratio of negative to positive Schick reactions reached a certain magnitude, cases of Diphtheria ceased to appear, in spite of the presence of many virulent carriers. In the writer's opinion the hypothesis that best explains this apparent paradox is as follows:—As the diphtheria parasite passed from boy to boy it lost the power of producing symptoms under those conditions

* This child was operated on by Dr. Purce (Derbyshire C.C.), and Diphtheria bacilli were found in the crypts of the Tonsils even though four swabs taken prior to operation had been reported negative.

which prevailed in Greenwich School—that is, when the herd immunity was such that the number of passages through immune hosts greatly exceeded the number of passages through susceptible hosts.”

A possible explanation of the cessation of the outbreak might have been due therefore to the fact that *the diphtheria parasite in its passage from one immunised child to another lost its power of producing symptoms*. If this is true then the rapid immunisation of a large number of contacts after a search for, and isolation of, carriers would appear to be a reasonable method of stopping an outbreak. Among the 142 children immunised 8 only had sore arms and 1 out of the 8 constitutional symptoms of any severity (this was in an overcrowded house), the main symptom being faintness, which lasted for about a day.

The Schick Test was carried out in the case of 14 of the children over 12 years of age and 5 were found positive.

In combating Diphtheria, then, in schools the method of “putting companies of immunised children into the fighting line” may be of value.

(7) FOLLOWING UP.

This is done as mentioned on page 10 of my report for 1925. In 1926 I made 4471 re-examinations of children who had been found to have defects.

SCHOOL NURSING AND THE CARE OF THE PRE-SCHOOL CHILD.

8718 examinations were made in schools of children regarding cleanliness and 156 children were found unclean; average visits per school, 5.3.

Visits were paid to the houses of children for following up purposes, and many visits were made to schools in connection with the Diphtheria outbreak in the summer and autumn.

The Nurses also carry out duties at the Clinics as follows:—

Minor Ailments : Both Nurses.

Dental Clinic : 1 Nurse.

Eye Clinic : 1 Nurse.

Ear, Nose and Throat Clinic : Wood's Hospital Staff.

Measles cases are followed up in the homes by the Queen's Nurses.

The Nurses who form our present staff also do health visiting under our Maternity and Child Welfare Scheme, each Nurse having a district to herself.

If the Dental work were carried out to deal adequately with dental defects 3-4 half days a week would be necessary for the work and if the visiting of infants from 1 year to school age were carried out as it should be additional nursing would be required.*

The remarks of Sir George Newman in his Report of 1925 (*re* The Care of The School Child) emphasise the need for greater care of children from 2-5 years so that children will not be entering the schools already defective.

In Glossop 26·7 per cent of the children enter the schools with defects of some sort or other not including dental defects and uncleanness (*i.e.*, about one in every four).

Many of these defects are clearly preventable such as Malnutrition, anaemia, enlarged glands, diseases of the ear, nose and throat.

Better nurture would I think materially reduce them and the extension of the school clinics to the pre-school children.

Clinics would also be valuable in allowing such defects to get treatment in time.

* The employment of a dental attendant would perhaps be adequate and cost less.

I suggest therefore that this latter suggestion be acted on and further that the School and Maternity and Child Welfare Committees carefully consider the question of an increased Dental service which would be available for both children of and under school age with the increased (*) nursing necessary for the purpose of the additional clinics and for visiting the homes of children from 2—5 years old.

(8) MEDICAL TREATMENT.

Defects.	Mode of Treatment Available.	No. Treated.	Treatments.
(a) Minor Ailments.	Minor Ailments Clinic.	217	4259
	Private Doctors.	98	—
(b) Diseased Tonsils and Adenoids.	Private Doctors	3	—
	Tonsil and Adenoid Clinics at Wood's Hospital	21	—
(c) Tuberculosis.	Private Doctors.	—	—
	Tuberculosis Dispensary.	—	—
(d) Skin Diseases.	Private Doctors.	10	—
	Minor Ailments Clinic.	33	—
(e) External Eye Disease.	Private Doctors.	6	—
	Minor Ailments Clinic.	30	—
(f) Vision.	Ophthalmic Clinic.	57	—
(g) Ear Disease and Hearing.	Minor Ailments Clinic.	17	—
	No definite arrangements for operations.		
	Private Doctors.	6	—
(h) Dental Defects.	Dental Clinic.	295	955
(i) Cripples.	No "Remedial" Clinic.	—	—
(j) Goitre	Clinic.	52	1667

The above table gives the number of children treated at the clinics during 1926.

REPORT OF SCHOOL DENTIST FOR YEAR 1926.

It will be observed from the analysis of the past year's work in the Dental Clinic what a large number of temporary teeth have been extracted. It should be especially noted that these are

* See footnote on bottom of previous page.

septic teeth in almost every case and have to be extracted owing to the danger to the child's general health. These septic teeth are the sequence of caries or ordinary decay and much of this is caused by improper diet. As soon as any teeth appear, hard crusty food should be eaten and less of the "Potato and Gravy" kind of meals. The very best assistance can be given by parents towards success in their children's dentition by attending to this very important question of diet. It should be remembered that this compulsory early removal of the temporary teeth results in wrongful eruption, overcrowding and consequent early decay and loss of the permanent teeth.

HAROLD D. FIRTH, L.D.S.

DENTAL WORK.

Our School Dentist, Mr. Harold Firth found in 1925 that 453 children required treatment, of these 256 were treated but we cannot say the treatment was finished in these.

In 1926 the number found to require treatment was 544 and of these 295 were treated and we cannot say their treatment was concluded. From these figures it will be seen that arrears are being piled up and that there are far more children requiring treatment than those actually dealt with. More sessions are required therefore for dental work and it must be remembered that hand in hand with dental work the prevention of caries must be carried out and it is here that the greater care of the pre-school child is so valuable.

Mothers are carefully instructed by us at the Maternity and Child Welfare Clinics in the prevention of caries by dieting, etc., but ingrained habits are difficult to overcome and the average mother's hands, particularly if she has to work in the factory, are fairly full.

The School Dentist has been asked to see that Dental Drill is carried out in the Schools.

More dental care therefore, both for the school child and pre-school child associated with more infant visiting from 2—5 years would in addition to preventing other defects help to prevent dental decay among children.

Ophthalmic Clinic.

Attendances	...	...	...	...	...	172
Children Tested	...	...	...	...	...	57
Re-Tested	...	...	...	...	...	7
Number of prescriptions given				...	...	52
Number who obtained glasses				...	...	46
Number of examinations <i>re</i> suitability of glasses given	...	...	...	...	...	112

Minor Ailments Clinic.

During 1926 217 children were treated and 4259 treatments were given.

(9) OPEN AIR EDUCATION.

There is no open air school in Glossop; in view of the number of delicate children in the Borough such a school would be valuable. The number of such children in 1926 was 228, excluding cripples and cases of Tuberculosis.

(10) PHYSICAL TRAINING.

There are two instructors of physical training, Miss Hyden and Mr. Hobson. The schools are visited periodically and instruction given.

Exercises are also carried out by the children under the direction of the ordinary teachers, and the S.M.O. gives the names to the Head Teacher of children who are unfit.

(11) PROVISION OF MEALS.

Children now receive Milk in school either by paying (1d. a day) or free if they are recommended to have it by the School Medical Officer and their parents cannot pay.

The number of children having milk during week ending 15th January, 1927, was 511, of which 36 get it free.

The average attendances of school children is about 2,300 therefore about 22.2 per cent. get milk.

The amount generally given is about $\frac{1}{3}$ pint.

I feel sure that the giving of milk to so many children will in time help to improve the general health of the children, the amount given is small but when a taste is cultivated for milk and its value is understood, more will be taken at home.

(12) SCHOOL BATHS.

The various schools in rotation now use the School Baths.

The physical training involved in teaching children to swim is worth paying for and learning to swim should be in an island like Britain a necessary part of Education ; I trust therefore that this scheme will be a success.

It is very necessary that adequate care should be taken to have clean water.

(13) CO-OPERATION OF PARENTS.

All parents are invited to be present during medical inspection and they are encouraged to come. They are given a leaflet on the care of children and points raised during the examination are made use of to give each mother an idea of how she can best improve the health of her child. This, after all is said and done, is by far the most valuable side of health propaganda work.

Advice given *hot* with the facts and needs before one, is of far more use than general and discursive remarks.

Besides the mother, feeling that it is *her own* child that she is being told about, is in a more receptive mood and more ready to follow out what she is told.

A circular letter is sent to parents prior to the inspection. I give below a copy of it

LETTER TO PARENTS REGARDING SCHOOL MEDICAL INSPECTION.

The Medical Inspection of your child at school is to help your child to be well while at school (some children find school life trying, especially at first) and to leave school fit to take up his or her life's work not handicapped by a crippling defect.

Some diseases are very insidious, they come on unawares and the child, who to all appearance looks healthy, often is found to have signs or symptoms of disease; (indeed in all England and Wales about 1 in every 5 children medically examined in 1924 had a defect of some kind other than that of teeth) disease that may cause a serious breakdown when the child has become a breadwinner perhaps with a family; in which case you may be sure your child will not be grateful if you have given in to some objection on his or her part to being examined.

It is only by the regular and systematic examination of your child that some such thing as this can be prevented.

I know all parents would do their level best and spare nothing to prevent such a happening; and so it is I feel sure you will co-operate to this end by coming if possible to medical inspection yourself, and you are heartily invited, and by carrying out advice given.

Perhaps you may say you have your own Doctor to examine your child. Now School Medical Inspection is rather different to getting a doctor when your child is already ill.

At school, your child's height and weight are taken and the result can be given you; the eyes, ears and teeth, etc., are examined and a careful search is made for the beginning of disease and your child's health is compared with that of the normal child. Prevention is the whole idea; to prevent disease getting a grip of

your child. The School Department has also clinics to help you ; a dental clinic, an eye clinic, a minor ailments clinic and a nose and throat clinic.

No man in charge of a machine starts it to do heavy work, or if in charge of a train or vehicle about to begin a long journey omits to give it a "run over" to see all is O.K. A child's life is no less precious.

E. H. MARCUS MILLIGAN,
School Medical Officer.

(14) CO-OPERATION OF TEACHERS.

The teachers co-operate by sending out notices to the parents for medical inspection, by getting the room, often a cloak room, ready and warmed and by giving information regarding the health of the children, certain details are also entered on the record envelope by the teachers.

(15) CO-OPERATION OF ATTENDANCE OFFICER.

During outbreaks of disease the Attendance Officer co-operates by giving lists of absentees and in advising parents to obtain medical advice ; in cases of prolonged absence from school, children are referred by the Attendance Officer to the S.M.O.

(16) CO-OPERATION OF VOLUNTARY BODIES.

The N.S.P.C.C. acts in certain circumstances on the recommendation of the S.M.O.

(17) BLIND, DEAF AND EPILEPTIC CHILDREN.

The numbers of these children with other information are given in Table II.

There is only one totally blind child, a boy, and he is in an Institution for the Blind. This boy has been assisted by the Derbyshire Fund for the Blind.

There are two children that are very deaf; both are mentally defective (border line cases), and are attending an elementary school.

Of Epileptics there is one severe case; this child is also mentally defective.

To deal with double defectives—that is, children who are blind, deaf and dumb or epileptic and also mentally defective—a special institution would be required, and there is as far as I am aware no accommodation available for children so afflicted.

(a) To find out the existence of these children in the Borough a form is sent every year to each Head Teacher to fill in with the names, addresses and ages of such children; the Attendance Officer also is requested to furnish the S.M.O. with similar details.

The School Nurses, who are also Health Visitors, report such cases to the M.O.H. and S.M.O.

(b) There is no special supervision beyond that given in school, where they attend school, and that given by parents.

The S.M.O. advises parents regarding the care of such children—*e.g.*, the special supervision necessary for a mentally defective girl.

The only form of supervision is that by the School Nurses.

There is no local branch of the Central Association of Mental Welfare in the Borough.

(c) There are no Special Schools in Glossop.

(18) NURSERY SCHOOLS.

There are no (*) Nursery Schools in Glossop; there is undoubtedly a need for one.

* See page 2.

(21) EMPLOYED CHILDREN.

It is the duty of the Education Dept. to report to the S.M.O. children for examination.

During 1926 12 children were reported and examined.

(22) SPECIAL INQUIRIES :—INVESTIGATION
RE GOITRE (continued).

Results of Treatment.

I give below details of the results of treatment of Goitre cases during 1926.

Goitre Cases Treated in 1926.

			New Cases.	Length of Time under Treatment (in Months).
Number of Cases	...	32		
Cured	...	9	6, 9, 4, 11, 4, 6, 4, 5, 6.	
Improved	...	14	4, 2, 8, 6, 4, 3, 2, 4, 2, 8, 5, 8, 8, 8	
Improvement Slight		2	1½, 6.	
No Improvement	...	7	1, 3, 3, 4, 1, 8, 8.	

Cases Carried Over from 1925.

			Length of Time under Treatment (in Months).
Number of Cases	...	23	
Cured	...	8	12, 23, 24, 17, 15, 22, 19, 20.
Improved	...	8	8, 3, 18, 3, 3, 9, 18, 16.
Improvement Slight		4	13, 8, 10, 14.
No Improvement	...	3	2½, 12, 14.

Of the above 55 cases under review 17 were cured, 22 were improved, 6 had slight improvement, and 10 no improvement.

The length of time in months of treatment will be seen above.

The drugs used were either Iodostarin in tablets containing 5 m.g. Iodine or tablets containing 1/10 grain Iodine. The amount given varied from 1 to 3 tablets given on one day during the week. In no case did the amount of tablets exceed 3.

All children were carefully examined for any symptoms suggestive of Exophthalmic Goitre and no sign of this disease was found even in an initial stage.

Among signs looked for were:—

Alteration in the Pulse.

Tremor.

Loss of Weight.

Alteration of Convergence of the Eyes.

Delay in the upper lid following the finger.

The pulse was tested by getting the children to give 12 jumps and by counting the pulse before and immediately after and the time it took to return to normal.

Improvement in many cases was very slow, as will be seen from the table given above.

I think the amount of Iodine given could be safely increased or some other method of treatment could be substituted or given to supplement it, such as thyroid extract.

Out of the 55 cases 10 were not improved; of these 10, 4 only had more than 4 months treatment. Of cured cases 3 were cured in 4 months, 1 in 5 months, 3 in 6 months, 1 in 9 months 1 in 11 months, and the remaining 8 in 1 year or over. Of those improved the majority took 8 months or less. Two took as long as 18 months.

It is apparent that with the present dosage (3/10 gr. Iodine in tablets or 15 m.g. Iodine as Iodostarin) treatment must be carried out regularly over a prolonged period.

GENERAL RESULTS.

I give below the percentage of Goitre found among the routine cases in 1926 and previous years.

It will be seen that Goitre is not so prevalent since the method of treatment was put into operation, and that those cases found were not so pronounced, that the majority came under the observation heading; percentage XX cases—1924, 3.1; 1925, 3.2; 1926, 1.1.

Goitre at Routine Inspection.

		No. Examined.		XX or more.		X Cases.		Percentage Goitrous.
1924	...	950	...	30	...	18	...	5
1925	...	920	...	30	...	20	...	5
1926	...	919	...	11	...	25	...	4

During the year Dr. Ash, County M.O.H. of Derbyshire, and Dr. Turton visited two schools and along with me examined children for Goitre.

I give below the (*) results obtained:—

ST. MARY'S R.C. SCHOOL.

GIRLS—

Age.		Number Examined.		Number Goitrous.	X	XX	XXX	XXXX
13	...	11	...	5	4	—	1	—
12	...	6	...	1	1	—	—	—
11	...	14	...	4	3	1	—	—
10	...	8	...	2	2	—	—	—
9	...	4	...	0	—	—	—	—
8	...	9	...	2	2	—	—	—
		—		—				
Total	...	52		14				
				X	...	12		
				XX	...	1		
				XXX	...	1		
				XXXX	...	0		
Percentage...	...			All	...	...	26.9	
Do.	...			XX or over	...	...	3.8	

* I am indebted to Dr. Turton for these tables.

BOYS—

Age.		Number Examined.		Number Goitrous.	X	XX	XXX	XXXX
13	...	1	...	1	1	—	—	—
12	...	10	...	3	3	—	—	—
11	...	13	...	2	1	1	—	—
10	...	6	...	0	—	—	—	—
9	...	4	...	1	1	—	—	—
8	...	10	...	1	1	—	—	—
		—		—				
	Total...	49		8				
				X	...	7		
				XX	...	1		
				XXX	...	0		
				XXXX	...	0		
	Percentage...		...	All	..	...	16.3	
	Do.	...	...	XX or over		...	2.0	
	Date, 13th Oct., 1926.						Av. = 2.7	

GLOSSOP COUNCIL SCHOOL (MIXED).

GIRLS—

Age.	Number Examined.		Number Goitrous.		X	XX	XXX	XXXX
13	...	22	...	4	3	1	—	—
12	...	18	...	4	2	1	1	—
11	...	13	...	2	2	—	—	—
10	...	10	...	0	—	—	—	—
9	...	11	...	0	—	—	—	—
8	...	2	...	0	—	—	—	—
		—	—					
Total...		76	10					
					X	...	7	
					XX	...	2	
					XXX	..	1	
					XXXX	...	0	
Percentage...		...	All		...	...	13.1	
Do.		...	XX or over		...	3.9		

BOYS—

Age.		Number Examined.		Number Goitrous.	X	XX	XXX	XXXX
13	...	26	...	1	1	—	—	—
12	...	19	...	3	2	1	—	—
11	...	14	...	2	2	—	—	—
10	...	7	...	0	—	—	—	—
9	...	8	...	0	—	—	—	—
8	...	0	...	0	—	—	—	—
		—		—				
	Total...	74		6				

X	...	5
XX	...	1
XXX	...	0
XXXX	...	0

Percentage...	...	All	...	...	8.1
Do.	...	XX or over	...	...	1.3

Date, 13th Oct., 1926.

$$A_V = 2.6 \text{ (all).}$$

X = enlargement just visible ; XX = contour of neck altered ;
XXX and XXXX = very large Goitres.

These Tables show that in the majority of cases the enlargement found was slight (marked X). The standard used by Dr. Ash and Dr. Turton (in denoting enlargement) is similar to that used in my reports.

SOME GENERAL OBSERVATIONS.

In last year's Report I pointed out that there appeared to be a relationship between the incidence of Goitre and diseased conditions of the ear, nose and throat and also rheumatism and I gave tables in support of this view.

I should like these points investigated in a much larger area than that of Glossop as I consider it an important one for the prevention and treatment of Goitre.

During my examination of Goitrous children I have frequently noticed that if the child affected had a cold, sore throat or some other septic condition that the thyroid gland enlarged. Have other observers noticed this ?

The prevalence of enlargement of the thyroid at the age of puberty has been already remarked on in my previous Reports (see Tables 1924 and 1925 School Medical Reports, Glossop) and its greater frequency among girls (about 3 to 1) as compared to boys.

In addition to "infective" conditions, sex and puberty would also appear to be closely associated with thyroid enlargement.

The isolation of thyroxin (an iodine containing organic compound) from thyroids and the effect of iodine in treating thyroid enlargement does show I think that there is some relationship between iodine and thyroid enlargement, it does not however permit us to say that lack of iodine is the one and only cause of Goitre as some workers have gone so far as to do.

The thyroid evidently is a gland of varied functions and varied adverse conditions may have an injurious effect on it and cause enlargement as a response to a call for increase of function.

The problem of Endemic Goitre is perhaps a separate one from that of the enlargements found at the adolescent age ; possibly (as McCarrison has given us to believe) it is caused by impure water supplies.

In investigation at Bath (1919) an outbreak in a school appeared to me to be associated with the prevalence of lice and in certain instances I thought the disease had been spread by contact.

I should like therefore to see if it is possible for verminous goitrous animals to spread goitre to other animals.

It would also be interesting to see if the faecal matter of goitrous animals could spread goitre to non-goitrous animals.

I believe the settling of whether the spread of Goitre by these means is possible or not, would bring us further in our understanding of the problem of the ætiology of Goitre.

Dr. Philip Turton, of Heanor, who has been carrying out investigations regarding Goitre for a considerable time, analysed some samples of water and soil from Glossop and found as follows:—

* WATER (Swineshaw Reservoir Supply)	.0085	parts Iodine per	
		10 million	
SOILS—Gladstone Street Allotments	...	9.3	parts per 10 million
Bridgefield Allotments	...	3.9	„ „
Garden in Crosscliffe	...	15.9	„ „
Swineshaw Gathering Ground :			
No. 1 (with grass and roots)	57.9	„	„
No. 2 (sandy and peaty soil)	Nil 19.3	„	„
No. 3 (light brown sandy soil)	20.6	„	„

Iodine it will be seen was found both in the samples of soil and water, and also it is interesting to note manganese was not found. The complete results of Dr. Turton's investigations (covering many areas) will be awaited with interest by all persons studying the Goitre problem.

No. 2.—INVESTIGATION OF RHEUMATIC STIGMATA IN SCHOOL CHILDREN AND THEIR ASSOCIATION WITH OTHER DEFECTS.

An investigation on the above lines is being carried out, and the first findings are just too late for inclusion in this Report. These (first findings) will be communicated to the Board at an early date. A thousand children have been examined for rheumatic nodules, heart defects, bad teeth, ear, nose and throat defects, etc., and their association together has been tabulated.

One thing so far is quite clear, that rheumatic stigmata are exceedingly common and are to be found in 10 per cent. or more of school children of all ages.

E. H. MARCUS MILLIGAN, M.D., D.P.H.,
School Medical Officer.

* I am indebted to Dr. Turton for these details.

TABLE I.—RETURN OF MEDICAL INSPECTIONS

A. ROUTINE MEDICAL INSPECTIONS.

Number of Code Group Inspections

(see note b).

Entrants	...	...	...	...	...	...	355
* Intermediates		...	..	...	...	...	160
Leavers	348
							<hr/>
Total	863

Number of other Routine Inspections... .. 56

(see note c).

Total	919
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B. OTHER INSPECTIONS.

Number of Special Inspections... .. 1290

(see note d).

Number of Re-inspections 4471

(see note e).

Grand Total	6680
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* Births in 1918 lowest on record, 258, of which 12 died.

Children 7-8 previously examined by Board's instructions
not re-examined.

Table II.—A. Return of Defects found by Medical Inspection in Year ended 31st December.

Defect or Disease.					Routine Inspections.		Special Inspections.	
					No. of Defects.		No. of Defects.	
					Requiring Treatment.	Requiring to be kept under observation, but not requiring Treatment.	Requiring Treatment.	Requiring to be kept under observation, but not requiring Treatment.
(1)	(2)	(3)	(4)	(5)				
Malnutrition	14	21	13	11				
Uncleanliness. (See Table IV., Group V).	—	—	—	—				
Skin {	Ringworm :							
	Scalp	—	—	4				
	Body	—	—	5				
	Scabies	—	—	—				
	Impetigo	—	—	11				
	Other Diseases (non-Tubercular)	1	1	14				
Eye {	Blepharitis...	2	1	13				
	Conjunctivitis	—	—	11				
	Keratitis	—	—	—				
	Corneal Opacities..	—	—	8				
	Defective Vision (excluding Squint)	53	—	—				
	Squint	8	2	1				
	Other Conditions...	1	—	—				
Ear {	Defective Hearing	4	1	—				
	Otitis Media	4	—	12				2
	Other Ear Diseases	—	—	6				—
Nose and Throat {	Enlarged Tonsils only	29	26	60				1
	Adenoids only	16	15	19				—
	Enlarged Tonsils and Adenoids	13	10	12				—
	Other Conditions	4	4	23				—
Enlarged Cervical Glands (Non-Tuberculous)					39	110	64	9
Defective Speech					3	—	—	—
Teeth—Dental Diseases (<i>see note a</i>) (see Table IV, Group IV).					—	—	—	—

TABLE II.—*continued.*

(1)					(2)	(3)	(4)	(5)
Heart and Circulation	Heart Disease :							
	Organic				4	8	1	1
	Functional				—	90	—	2
	Anæmia				14	18	21	1
Lungs	Bronchitis				8	4	4	1
	Other Non-Tubercular Diseases				—	—	1	—
Tuber- culosis	Pulmonary :							
	Definite				3	—	3	—
	Suspected				4	15	5	5
	Non-Pulmonary :							
	Glands				3	3	5	2
	Spine				—	—	—	—
	Hip				—	—	—	—
	Other Bones and Joints ..				—	—	—	—
	Skin				—	—	—	—
Nervous System	Other Forms... ..				—	—	8 (eye)	—
	Epilepsy				—	—	—	—
	Chorea				—	—	2	—
	Other Condition				1	—	—	—
Defor- mities	Mental Defects				—	1	3	3
	Rickets				3	8	—	—
	Spinal Curvature... ..				1	—	—	—
Other Defects and Diseases ..	Other Forms				8	—	—	—
	Of which Goitre				25	145	57	—
	Rheumatism				11	26	42	—
					9	119	2	—

B. NUMBER OF *individual children* (see note b) FOUND AT Routine MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DEFECTS) ... 274

Group.	Number of Children.		Percentage of Children found to require treatment. See note d.
	Inspected See note c.	Found to require treatment.	
1	2	3	4
CODE GROUPS :			
Entrants	355	95	26·7
Intermediates ..	160	47	29·3
Leavers	340	118	33·9
Total (code groups)	863	260	30·1
Other routine inspections ..	56	14	25·0

Table III.—Return of all Exceptional Children
in the Area (see Note a).

			Boys	Girls	Total
Blind (including partially blind). See Note b	(i) Suitable for training in a School or Class for the totally blind	Attending Certified Schools or Classes for the Blind ...	1	—	1
		Attending Public Elementary Schools See Note c.	—	—	—
		At oth'r Institutions At no School or Institution ...	—	—	—
	(ii) Suitable for training in a School or Class for the partially blind	Attending Certified Schools or Classes for the Blind ...	—	—	—
		Attending Public Elementary Schools See Note c.	1	1	2
		At oth'r Institutions At no Schools or Institution	—	—	—
Deaf and Dumb (including dumb and partially deaf). See Note d.	(i) Suitable for training in a School or Class for the totally deaf or deaf and dumb	Attending Certified Schools or Classes for the Deaf ...	—	—	—
		Attending Public Elementary Schools ...	*2	—	2
		See Note c. At other Insti- tutions ...	—	—	—
	(ii) Suitable for training in a School or Class for the partially deaf	At no School or Institution..	—	—	—
		Attending Certified Schools or Classes for the Deaf ...	—	—	—
		Attending Public Elementary Schools ...	2	1	3
Mentally Defective	Feeble Minded (cases not notifiable to the Local Con- trol Authority) See Note E.	See Note c. At other Insti- tutions ...	—	—	—
		At no School or Institution..	—	—	—
		Attending Certified Schools for Mentally Defective Children Attend- ing Public Ele- mentary Schools..	1	—	1
		See Note C. At other Insti- tutions ...	7	3	10
		At no School or Institution ...	—	2	2
		At no School or Institution ...	†5	1	6

* Also Mentally Defective.

†/Epileptic.

TABLE III.—*continued.*

			Boys	Girls	Totals
Mentally Defective — <i>contd.</i>	Notified to the Local Control Authority <i>during the year</i>	Feeble minded Imbeciles Idiots	— — —	— — —	— — —
Epileptics.	Suffering from epilepsy which is not severe. See Note f.	Attending Certified Special Schools for Epileptics ...	—	—	—
		In Institutions other than Certified Special Schools ...	—	—	—
		Attending Public Elementary Schools	—	—	—
		See Note c. At no School or Institution... ..	*1	—	1
	Suffering from epilepsy which is not severe. See Note g.	Attending Public Elementary Schools	1	3	4
		See Note c. At no School or Institution ...	—	—	—
Physically Defective	Infectious Pulmonary and glandular Tuberculosis See Note h.	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board ...	—	—	—
		At oth'r Institut'ns	—	—	—
		At no School or Institution... ..	1	1	2
	Non-Infectious but active pulmonary and glandular Tuberculosis See Note h.	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board ...	—	1	1
		At Certified Residential Open Air Schools	—	—	—
		At Certified Day Open Air Schools	—	—	—
At Pt Public Elem. Schools, See Note c.		18	15	33	
	At other Institut'ns	—	—	—	
	At no School or Institution	—	—	—	

* Also Mentally Defective.

TABLE III.—continued.

			Boys	Girls	Total
Physically Defective	Delicate children <i>e.g.</i> , pre or latent tuberculosis mal-nutrition. debility, anæmia, &c. See Note h.	At Certified Residential Open Air Schools	—	—	—
		At Certified Day Open Air Schools...	—	—	—
		At Public Elementary Schools ...	140	88	228
		See Note c			
		At other Institut'ns	—	—	—
		At no School or Institution... ..	4	3	7
	†Active non-pulmonary tuberculosis. See Note h.	At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board ...	1	—	1
		At Public Elementary Schools ...	4	2	6
		See Note c.			
		At other Institut'ns	—	1	1
		At no School or Institution	—	—	—
	Crippled Children (other than those with active tuberculous disease), <i>e.g.</i> , children suffering from paralysis, &c., and including those with severe heart disease. See Note h.	At Certified Hospital Schools ...	—	—	—
		At Certified Residential Cripple Schools	—	—	—
		At Certified Day Cripple Schools ...	—	—	—
		At Public Elementary Schools ...	21	11	32
		See Note c.			
		At other Institutions	1	1	2
		At no School or Institution... ..	†2	—	2

† Other than tuberculosis of lungs and glands.

Table IV.—Return of Defects Treated during the
Year ended 31st December.

(See note a).

TREATMENT TABLE,

GROUP I.—MINOR AILMENTS, excluding Uncleanliness, for which
see Group 5.

Disease or Defect.	Number of Defects treated, or under treatment during the year.		
	Under the Authority's Scheme. See Note b.	Otherwise.	Total.
1	2	3	4
SKIN :—			
Ringworm—Scalp	4	2	6
Ringworm—Body	5	—	5
Scabies	—	1	1
Impetigo	10	1	11
Other skin disease	14	6	20
MINOR EYE DEFECTS	30	6	36
External and other, but excluding cases falling in Group II.			
MINOR EAR DEFECTS	17	6	23
See Note c.			
Enlarged Glands	9	67	76
Goitre	52	3	55
MISCELLANEOUS	76	6	82
e.g., minor injuries, bruises, sores, chilblains, etc.			
Total	217	98	315

No. of Attendances at Minor Ailments Clinic 4259

TABLE IV.—*continued.*

GROUP II.—DEFECTIVE VISION AND SQUINT, excluding Minor Eye Defects treated as Minor Ailment—Group I.

Defect or Disease.	Number of defects dealt with.			
	Under the Authority's Scheme. See Note b.	Submitted to refraction by private practitioner or at hospital apart from the Authority's Scheme.	Otherwise.	Total.
1	2	3	4	5
Errors of Refraction, including Squint. Operations for squint should be recorded separately in the body of the Report.	57	—	10	67
Other Defect or Disease of the eyes, excluding those recorded in Group I.	—	—	—	—
Total	57	—	10	67

Total number of children for whom spectacles were prescribed :—

(a) Under the Authority's Scheme 52

(b) Otherwise 10

Total number of children who obtained or received spectacles.—

(a) Under the Authority's Scheme 46

(b) Otherwise 10

GROUP III.—TREATMENT OF DEFECTS OF NOSE AND THROAT.

Number of Defects.				
Received Operative Treatment.			Received other forms of Treatment.	Total number treated.
Under the Authority's Scheme, in Clinic or Hospital. See Note b.	By Private Practitioner or Hospital, apart from the Authority's Scheme.	Total.		
1	2	3	4	5
21	3	24	22	70

* Refers to children with defective sight but found to be wearing glasses.

TABLE IV.—*continued.*

GROUP IV.—DENTAL DEFECTS.

(1) Number of Children who were:—

(a) Inspected by the Dentist:

Routine Age Group	$\left\{ \begin{array}{l} 5-376 \\ 6-378 \\ 7-321 \\ 8-342 \end{array} \right\}$	Total 1417
-------------------------	--	------------

Specials (*See note d*). 40

Grand Total 1457

(b) Found to require treatment 514

(c) Actually treated 295

(d) Re-treated during the year as the result of
periodical examination 309

(*See note e*).

(2) Half-days devoted to—Inspection 12
Treatment 48

Total 60

(3) Attendances made by children for treatment 564

(4) Fillings Permanent teeth 110
Temporary teeth 0

110

(5) Extractions Permanent teeth 78
Temporary teeth 767

845

(6) Administrations of general anæsthetics for extractions 0

(7) Other operations Permanent teeth 80
Temporary teeth 0

80

GROUP V.—UNCLEANLINESS AND VERMINOUS CONDITIONS.

(*See Note f*).

(i) Average number of visits per school made during the year by the
School Nurses.... 3.8.

(ii) Total number of examinations of children in the Schools by School
Nurses..... 8718.

(iii) Number of children found unclean..... 156.

(iv) Number of children cleansed under arrangements made by the
Local Education Authority..... 0.

(v) Number of cases in which legal proceedings were taken:

(a) Under the Education Act, 1921 0

(b) Under School Attendance Bye-laws 0

* 9 to 14 are periodical re-examinations.

STATEMENT OF THE NUMBER OF CHILDREN NOTIFIED DURING
1926 BY THE LOCAL EDUCATION AUTHORITY TO THE LOCAL
AUTHORITY UNDER THE MENTAL DEFICIENCY
ACT, 1913.

Diagnosis.	1926	
	Boys.	Girls.
Idiots 	0 ...	0
Imbeciles 	0 ...	0
Moral Imbeciles ...	0 ...	0
Feeble-minded :		
*(a)	0 ...	0
*(b)	0 ...	0
*(c)	0 ...	0
	—	—
Total 	0 ...	0

* Give separately the numbers

(a) Feeble-minded Children notified for supervision or guardianship under *Article 5* of the Mental Deficiency (Notification of Children) Regulations, 1914 (*i.e.*, Children in respect of whom the Board's formal certificate (Form 308 M) has been issued).

(b) Feeble-minded Children notified under *Article 6* of these Regulations (*i.e.*, Children who, on or before attaining the age of 16, were about to be withdrawn or discharged from a Special School), and

(3) Other feeble-minded Children notified.

